AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A method for generating agitation noise comprising an arbitrary number of points, with predetermined histogram, shaped around at least one arbitrary frequency , comprising:

[[-]] [[the]] generation of noise by a succession of several sequences $\{h(kN+n)\}_{1\leq n\leq N}$ of M.N points (M, N integers ≥ 1), [[-]] [[[S2]:]] [[the]] choosing for each sequence of M basic subsequence(s) $\{h_{lm}(n)\}_{1\leq n\leq N,\ m\leq M}$ in a random and independent manner from among at least L basic subsequence(s) of N points shaped around a predetermined frequency (L integer ≥ 1),

[[[-S4]:]] [[the]]choosing in a random and independent manner, for each sequence, of the sign s applied to each of the chosen subsequences.

2. (currently amended): [[A]] The method for generating agitation noise according to claim 1 wherein ~~it comprises~~ [[[S6]:]] [[the]] choosing in a random and independent manner, for each sequence, of the direction of temporal reading R of each of the chosen basic subsequences.

3. (currently amended): [[A]] The method for generating agitation noise according to claim 1 wherein M = 1.

4. (currently amended): [[A]] The method for generating agitation noise according to claim 1 wherein the predetermined shaping frequency of the basic subsequences is equal to the arbitrary shaping frequency of the noise.

5. (currently amended): [[A]] The method for generating agitation noise according to claim 1 wherein ~~it comprises [S8]:~~ for each sequence, the interleaving E of several subsequences.

6. (currently amended): [[A]] The method for generating agitation noise according to claim 1 wherein the interleaved subsequences are either the M subsequences $\{h_{lm}(n)\}_{1\leq n\leq N,\ m\leq M}$ chosen from among L basic subsequences, or the ones part of the M chosen subsequences $\{h_{lm}(n)\}_{1\leq n\leq N,\ m\leq M}$ from among L basic subsequences, or several subsequences obtained by interleaving of several basic subsequences $\{h_l(n)\}_{1\leq n\leq N,}$.

7. (currently amended): [[A]] The method for generating agitation noise according to claim 5 wherein M = L.

8. (currently amended): [[A]] The method for generating agitation noise according to claim 5 wherein the predetermined shaping frequency of the basic subsequences is equal to double at least one of the arbitrary shaping frequencies of the noise.

9. (currently amended): [[A]] The method for generating agitation noise according to claim 1 wherein the choosing of a basic subsequence $\{h_l(n)\}_{1\leq n\leq N}$ leads to the reading of this basic subsequence in storage means.

10. (currently amended): [[A]] The method for generating agitation noise according to claim 1 wherein the basic subsequences $\{h_l(n)\}_{1\leq n\leq N}$ are equiprobable signals shaped around a predetermined frequency.

11. (currently amended): [[A]] The device for generating an agitation noise comprising an arbitrary number of points, with predetermined histogram, shaped around at least one arbitrary frequency implementing the method of ~~any one of~~ claim[[s]] 1 ~~to 10~~ comprising:

[[-]] means of successive provision [[(7)]] of several sequences $\{h(kN+n)\}_{1\leq n\leq N}$ of M.N points (M, N integers ≥ 1),

[[-]] means of selection [[(1)]], for each sequence, of M subsequence(s) $\{h_{lm}(n)\}_{1\leq n\leq N,\ m\leq M}$ in a random and independent manner from among at least L basic subsequence(s) of N points shaped around a predetermined frequency (L integer ≥ 1),

[[-]] means of selection [[(4)]], in a random and independent manner, for each sequence, of the sign applied to each of the chosen subsequences $\{h_{lm}(n)\}_{1\leq n\leq N,\ m\leq M}$.

12. (currently amended): [[A]] The device for generating agitation noise according to claim 11 wherein it comprises means of selection [[(5)]], in a random and independent manner, for each sequence, of the direction of temporal reading of each of the chosen basic subsequences.

13. (currently amended): [[A]] The device for generating agitation noise according to claim 11 wherein it comprises means of interleaving [[(6)]] of the M chosen subsequences, for each sequence.

14. (currently amended): [[A]] The device for generating agitation noise according to claim 11 wherein it comprises means of storage [[(3)]] of a basic subsequence and means of reading [[(2)]] of the chosen basic subsequence $\{h_{lm}(n)\}_{1\leq n\leq N,\, m\leq M}$ in the storage means [[(3)]].

15. (currently amended): [[A]] The digital analog converter comprising an agitation noise generation device as claimed in ~~any one of~~ claim[[s]] 11 ~~to 14~~.

16. (currently amended): [[A]] The frequency synthesis system comprising an agitation noise generation device as claimed in ~~any one of~~ claim[[s]] 11 ~~to 14~~.

17. (currently amended): [[A]] The sigma delta modulator comprising an analog digital converter on the direct channel, an agitation noise generation device as claimed in ~~any one of~~ claim[[s]] 11 ~~to 14~~, an adder adding the agitation noise generated by the agitation noise generation device to the input of the analog digital converter, and a digital analog converter on the return channel.